
Federal Reserve Bank of Boston Case Study

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Federal Reserve Bank of Boston**

**Rick Dorricott, Design Services Manager,
Energy Investment, Inc.**

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- Designed 1972, completed 1976
- 33 story tower; 5 story low-rise
- Unique support functions
- 1,130,000 square feet
- Steel construction with glass & aluminum facades
- Steam heating
- Electric powered chiller cooling

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Project Objectives

- **Energy efficiency, utility cost reduction**
- **Facility improvement, lighting and mechanical systems**
- **Environmental management, CFC compliance**

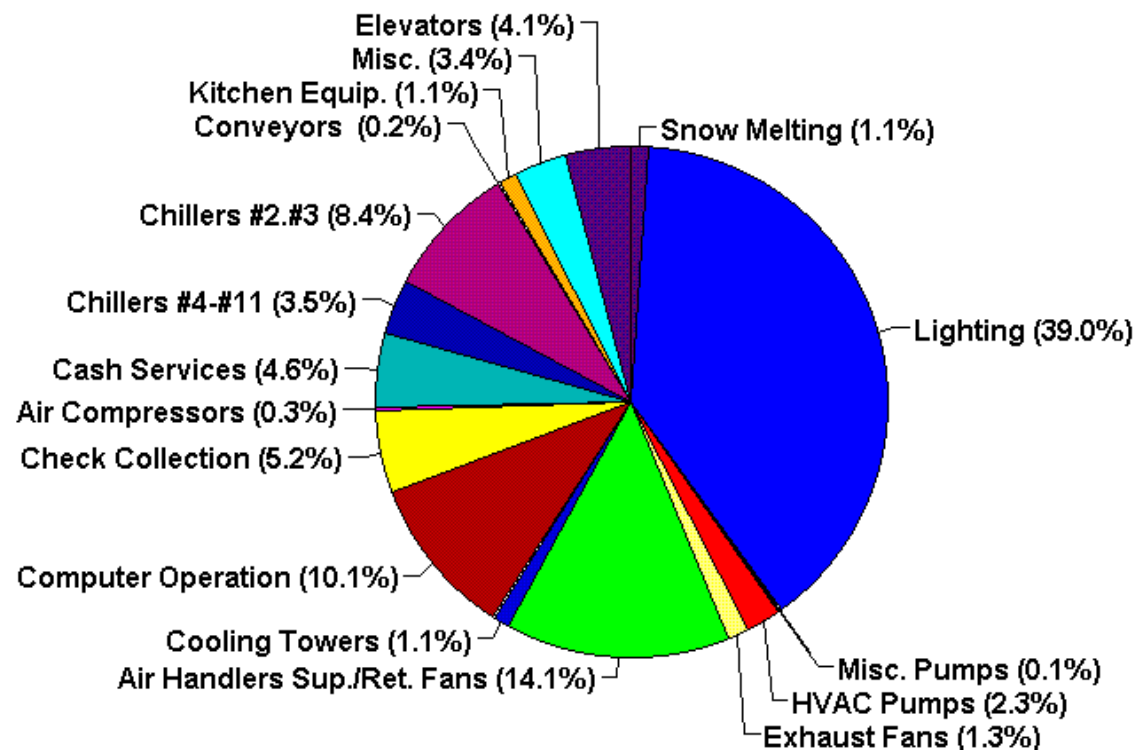
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Owner's Agent: Energy Investment, Inc.

- **Integrated energy improvement program**
- **Chiller replacement program**
 - **chiller specification and selection**
 - **system design**
 - **competitive bidding**
 - **construction review**

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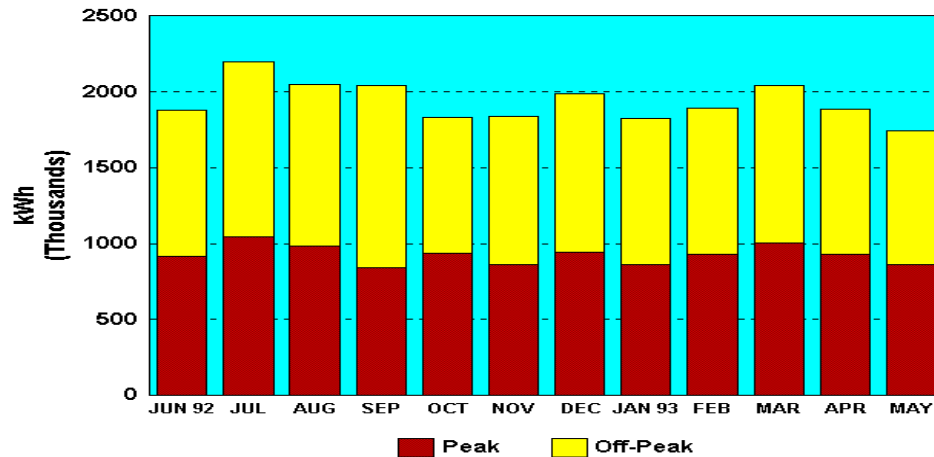
Electric End-Use



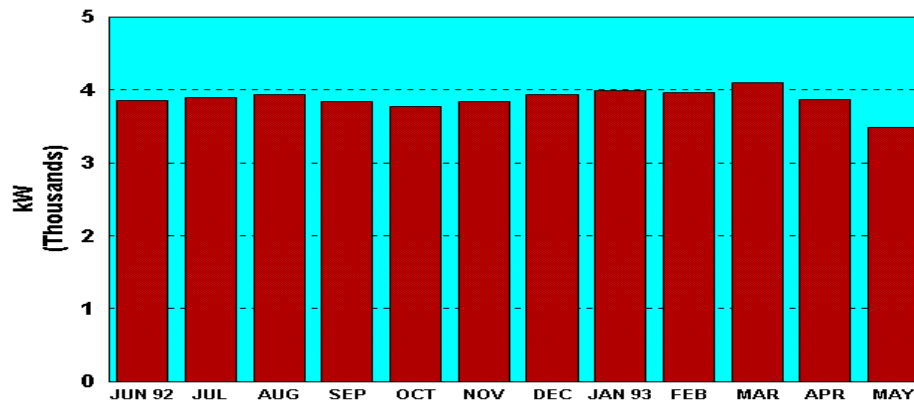
- **General office and banking**
 - 5 am - 6 pm weekdays
 - 7 am - 1 pm weekends
 - some 24 hour operation
- **24,000,000 kWh annual electricity consumption**

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Electricity Use



- Monthly electricity consumption 1992-93



- Monthly electricity demand 1992-93
 - relatively flat demand

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Natural Gas and Steam Use

